

# **James City Green Building Design Roundtable**

**Monday, March 1, 2010**

**Government Complex Building F Board Room**

**4:00 p.m. to 6:00 p.m.**

## **Roundtable Committee Members**

### Private Sector

Andrew Cronan, Guernsey Tingle Architects  
Robert Duckett, Peninsula Homeowners Builders Association  
Shereen Hughes, James City County Citizen  
Jack Kniest, Van Kniest Inc.  
Richard Krapf, James City County Citizen  
Dawn Reed, TRAFFIX/My Ride  
Kevin Wills, MBP

### Public Sector

John McGlennon, JCC Board of Supervisors  
Ellen Cook, JCC Development Management  
Bernie Farmer, JCC General Services  
Rick Hanson, JCC Housing and Development  
Steven Hicks, JCC Development Management  
Stephanie Luton, JCC Purchasing Dept.  
Scott Thomas, JCC Environmental Division  
Cheryl Waldren, JCC Development Management  
Scott Whyte, JCC Development Management

## **General Discussion**

Steven opened the meeting asking for any changes to the January minutes. No corrections.

Ellen discussed the changes to the website and needs more information from two subcommittees for their committee's information.

The committee had a guest visitor, Dawn Reed, with TRAFFIX/My Ride. She mentioned the MyRide website and how James City County is leading the way for Greenbuilding.

Steven mentioned the transportation benefits of MyRide website.

The Finance Committee discussed the James City County grant from the Environmental Protection Agency to reduce greenhouse gases. The grant was delivered thru the Housing Department at approximately \$300,000. The appropriation of funds will go before the Board of

Supervisors meeting on March 9, 2010. It is a three year project and part of the project is a census tract with some neighborhood foreclosure areas. William & Mary Masters students are involved in the project. Energy audits will directly benefit families in these target areas. Funding will be available as soon as the contract is approved and signed by the BOS.

Andy mentioned it will stimulate process for greenbuilding which could impact the area and financing.

Mr. McGlennon mentioned the grant was a very highly competitive one by the EPA- out 450 applications they only selected 25. JCC is listed first on the website. This will draw local builders to train and use foreclosed homes to retrofit. This will be broadcasted on the County cable station.

Rick mentioned that Earthcraft will do some of the homes slated thru the grant program.

Steven mentioned to the group the information in reference to the grants such as energy efficient grants, workshops for homebuyers and Thomas Nelson Community College to promote a workshop.

Andy mentioned there is additional training in Washington, D.C. for those who may be interested.

Rick mentioned Earthcraft is doing remodeling for energy efficient homes.

Steven thanked Stephanie for her great work on the grant.

Shereen talked about a presentation by Scott Blossom. He compared better site design techniques with LEED certification and ASLA's Sustainable Sites Initiative. She discussed Better Site Design and going thru a LEED certification process, and how choices can be made thru the LEED process as to which points to pursue. The other item discussed is a section of the report that needs to be revised. The committee is working on the website and the results of the write-up.

Steven mentioned looking at LEED process and how it is important to take into account local county ordinances that deal with sustainable sites issues. There will be policies to create for the standard ordinance.

With regard to the report text, Shereen mentioned the difference between public facilities versus private construction. The private construction needs to come to a consensus about the language.

Abigail Johnson did a presentation on how to reduce the energy load in a home built in 1965. The inspection was done to provide and see where her home was losing heat and how to circulate the air. The inspection was done to see if her home was properly insulated. The company came and did three tests: blower door, infrared and a duct blaster. Their focus at the Drying Company is on building envelope. Her home needed to be retrofitted. Focused on the air

leakage with an infrared camera and did a blower door test. The duct blaster shows all the leaks in a home. She showed to the group the various tests done in her home and how effective these tests can be. The leakage in the home is 1500 CFM(cubic feet per minute) which is measured in tons. Since the air is leaking in the home they sealed all the openings in the house. To help reduce the air leakage she increased insulation, sealed all the duct work, and air sealed in the attic, especially around the beams. She described the infrared camera showed the heat exchange and how much insulating would help in keeping the heat in the home. She showed the group the blower door test which showed if the door entrance is air tight. Abby also explained the CFM for the attic which was 4100 CFM. After she corrected the suggested areas, she mentioned the difference of comfort in her home. The house is 2500 square feet and if she completed all the work done she would have a payback in two years. She mentioned it was an interesting experience. She notices an immediate difference in her heating bill.

Robert asked if she looked into the crawl space.

She mentioned she would have the crawl space done.

Bernie mentioned by doing the improvements will increase the comfort improvement in your home.

Scott asked Abby if she has a fireplace in the home.

Abby replied once the ductwork was done, the fireplace now heats the whole home.

Andy mentioned he too had a audit done on his home and based on the report. He will need to do some improvements as well.

Steven asked, "What was the cost for work done on your home?"

Abby mentioned the cost was under \$4,000. Not only did the company do the testing, but they also sealed the necessary areas where air was leaking throughout the house.

Shereen asked would the tax credit apply to this testing and corrections.

Abby replied it would.

Andy mentioned a contractor in Virginia Beach who also does an energy audit.

Robert mentioned energy audit is a "hard sell" and mentioned years ago during the Carter Administration it was a mandate. The price has gone down since then.

Andy mentioned the thermostat program thru Virginia Natural Gas, to remind us of other alternatives to help conserve energy.

Ellen discussed the webpage and how Abby's information about the energy audit inspection of her home may be presented on the website for others to view and see how this is done. How it can help the homeowner reduce leakage in the home.

Mr. McGlennon mentioned this would be excellent to showcase on the website.

Jack mentioned how the energy audit sometimes is just common sense. Areas of leakage need to be insulated and caulked in some areas. He asked, "What is the source of combustion air for the fireplace and is it built into the fireplace?"

Andy mentioned to Jack that was good point and one of the first training given to check combustion air.

Steven mentioned there are advantages of the benchmark, and to demonstrate how to do an audit. Should there be a certain minimum requirement that a home should have. It would be something beneficial to explore later.

Robert mentioned the quality or work for CO<sub>2</sub> is required in Earthcraft homes.

Steven mentioned there is a certain minimum requirement a new home should have.

Robert stated if builders would just build homes in the accordance with the building codes which we have now. They are major changes in the codes ASHRAE 91.1 code and the 2009 Energy Code. This is a huge improvement in our value requirements in the walls, air quality requirements in order to make homes more energy efficient.

Steven mentioned how Codes can educate those about the new codes. JCC will make sure the builders are aware of the new codes.

Kevin mentioned how the Federal Government has energy conservation efforts for blow door testing is now required for 50,000 to 100,000 square foot commercial buildings at the end of construction. They are required to do this test at the end of construction in order to accept the project. If the County wants to do it voluntarily with their projects, that would be a tremendous advantage to do it, but that's what the federal government is doing on one of their projects.

Jack mentioned what can be done on the residential level is for the most part most of the good things people do could be a visual test. Seal all areas of holes by visual such as around windows, HVAC and electrical prior to closing up all these areas. Inspectors should be able to visually look in those particularly areas and see if they are sealed properly or not.

Steven mentioned that is a requirement. It would be nice if a test could be done prior to a CO (certificate of occupancy) being issued. If a test could be done it would enhance the quality of work that builders do.

Ellen spoke to the group about the James City County Green website; she explained about the various subjects that had been reviewed. She explained about the text and questions; and some are still under construction from the various committees. Additional information is linked to County website. Two committees are still under construction and will be on the new Beta site. A new part to the BETA site is the next step plan drawn up from the Finance Committee.

Steven mentioned how Ellen took on this task and has done an outstanding job on this project. He asked the committees if they have additional information to share and/or the status on some projects and information.

Mr. McGlennon mentioned how we, as the group, are learning about this process and the average citizen is learning as well. How to approach something they know is what they should be doing which could have significant financial benefits. Our next move should be how this can provide an economic opportunity since creating a new market for employment. We have so many existing homes in the community that could benefit from home construction, when no one really knew much about cost energy. We can development a market here for the entire Hampton Roads area would properly draw on it. This is a great opportunity to export some economic value out to bring some dollars back into the community.

Andy mentioned applying for additional grants. Apply for a state EECBG grant and a Department of Energy grant as well. If either comes thru, it would help with the resources to push Home Performance Energy Star Program and have spoken with them to bring into the area. It is a very big commitment and will need more resources.

Steven mentioned the grant allocation, Climate Showcase Communities: Advancing Greenhouse Gas Reduction through Affordable Housing, on the Board of Supervisors agenda for March 9, 2010.

The next meeting will be on Monday, April 5, 2010.